ABSTRACT

In one embodiment, a clock generation system comprises a redundant clock source (RCS) device for receiving multiple timing signals and for generating at least one clock from the timing signals for distribution to other circuits, and first and second hot-swappable oscillator (HSO) devices that each comprise a base housing and an oscillator unit for generating a timing signal, the base housing including an interconnect for coupling to the oscillator unit, the interconnect providing a first connection for the timing signal and providing a second connection to enable detection of insertion and removal of the oscillator unit, wherein the RCS device switches between timing signals from the first and second HSO devices in response to oscillator unit removal detected through the interconnect and switches between timing signals in response to timing signal failure.